Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the present application:

Listing of Claims:

Claims 1-13 (Cancelled).

Claims 14 (Original): A tunable thin film ferroelectric device fabricated using a method that isolates the loss due to the ferroelectric film.

Claims 15 (Original): A tunable device as claimed in claim 14, wherein the device comprises a ferroelectric capacitor and a resonator.

Claims 16 (Original): A tunable device as claimed in claim 14, wherein the device comprises a planar, second order combine bandpass filter coupled to a lumped element, interdigital capacitor.

Claims 17 (Original): A tunable device as claimed in claim 14, wherein the device comprises a microstrip resonator having an integrated gap capacitor.

Claim 18 (Cancelled).

Claims 19 (Original): A narrowband resonant circuit comprising a microstrip resonator having an integrated gap capacitor, wherein the resonator comprises thin metal strips separated by a gap

on a low loss substrate, the gap capacitor comprises a ferroelectric film deposited proximate the gap between the strips.

Claims 20 (Original): A narrowband resonant circuit as in claim 19, wherein the gap capacitor has a Q greater than about 100.

Claim 21 (originally duplicate Claim 20) (Cancelled).

Claim 22 (Currently amended): A tunable ferroelectric capacitor comprising:

a first conducting surface;

a second conducting surface, the first and second conducting surfaces comprising a capacitor;

a ferroelectric material proximate the first and second conducting surfaces;

a variable voltage line coupled to the ferroelectric material for changing a capacitance of the capacitor, responsive to a changing dielectric constant of the ferroelectric material, responsive to a voltage applied to the variable voltage line;

wherein a Q of the capacitor, when operated in a temperature range between about -50 degrees Celsius and 100 degrees Celsius, is greater than about 80 in a frequency range between 0.25 GHz and 7.0 GHz.

Claim 23 (Currently amended): A tunable ferroelectric capacitor as in claim ~~21~~ 22, wherein the quality factor, when operated in a temperature range between about -50 degrees Celsius and 100 degrees Celsius, is greater than about 80 in a frequency range between about 0.8 GHz and 7.0 GHz.

Claims 24 (Currently amended): A tunable ferroelectric capacitor as in claim ~~21~~ 22, wherein the quality factor, when operated in a temperature range between about -50 degrees Celsius and 100 degrees Celsius, is greater than about 80 in a frequency range between about 0.25 GHz and 2.5 GHz

Claims 25 (Currently amended): A tunable ferroelectric capacitor as in claim ~~21~~ 22, wherein the quality factor, when operated in a temperature range between about -50 degrees Celsius and 100 degrees Celsius, is greater than about 80 in a frequency range between about 0.8 GHz and 2.5 GHz.

Claims 26 (Currently amended): A tunable ferroelectric capacitor as in claim ~~21~~ 22, wherein the quality factor, when operated in a temperature range between about -50 degrees Celsius and 100 degrees Celsius, is greater than about 180 in a frequency range between 0.25 GHz and 7.0 GHz.

Claims 27 (Currently amended): A tunable ferroelectric capacitor as in claim ~~21~~ 22, wherein the quality factor, when operated in a temperature range between about -50 degrees Celsius and 100 degrees Celsius, is greater than about 180 in a frequency range between about 0.8 GHz and 2.5 GHz.

Claims 28 (Currently amended): A tunable ferroelectric capacitor as in claim ~~21~~ 22, wherein the quality factor, when operated in a temperature range between about -50 degrees Celsius and

100 degrees Celsius, is greater than about 80 for a capacitance in a range between about 0.3 pF and 3.0 pF.

Claims 29 (Currently amended): A tunable ferroelectric capacitor as in claim ~~21~~ 22, wherein the quality factor, when operated in a temperature range between about -50 degrees Celsius and 100 degrees Celsius, is greater than about 80 for a capacitance in a range between about 0.5 pF and 1.0 pF.

Claims 30 (Currently amended): A tunable ferroelectric capacitor as in claim ~~21~~ 22, wherein the quality factor, when operated in a temperature range between about -50 degrees Celsius and 100 degrees Celsius, is greater than about 180 for a capacitance in a range between about 0.3 pF and 3.0 pF.

Claims 31 (Currently amended): A tunable ferroelectric capacitor as in claim ~~21~~ 22, wherein the quality factor, when operated in a temperature range between about -50 degrees Celsius and 100 degrees Celsius, is greater than about 180 for a capacitance in a range between about 0.5 pF and 1.0 pF.

Claims 32 (Currently amended): A capacitor as claimed in claim ~~21~~ 22, wherein the capacitor has a capacitance of about 0.8 to 1.5 pF when zero voltage is applied to the ferroelectric material.

Claims 33 (Currently amended): A capacitor as claimed in claim ~~21~~ 22, wherein the ferroelectric material comprises barium strontium titanate.

Claims 34 (Currently amended): A capacitor as claimed in claim ~~21~~ 22, wherein the ferroelectric material comprises a film having a thickness of approximately one micron.

Claims 35 (Currently amended): A capacitor as claimed in claim ~~21~~ 22, wherein the capacitor is a microstrip gap capacitor.

Claims 36 (Currently amended): A capacitor as claimed in claim ~~26~~ 22, wherein the first conducting surface and the second conducting surface are separated by a gap approximately 2.5 microns wide.

Claims 37 (Currently amended): A capacitor as claimed in claim ~~21~~ 22, wherein the conductors are metal strips having a thickness in the range of 2-3 microns.

Claims 38 (Currently amended): A capacitor as claimed in claim ~~21~~ 22, wherein the capacitor is an overlay capacitor.

Claims 39 (Currently amended): A capacitor as claimed in claim ~~21~~ 22, wherein the second conducting surface comprises either gold or silver.

Claims 40 (Currently amended): A capacitor as claimed in claim ~~21~~ 22wherein:

a first taper to the ferroelectric capacitor from a ferroelectric capacitor bond pad comprises a contraction of the first conducting surface from about 4.0 mils wide to about 0.1 mils wide over a distance of about 1.0 mils; and

a second taper from the ferroelectric capacitor to a DC bias pad region comprises an expansion of the second conducting surface from about 0.1 mils wide to about 4.0 mils wide over a distance of about 1.0 mils.

Claims 41 (Currently amended): A tunable ferroelectric filter comprising:

a first element having an inductance;

a second element having a capacitance, the first and second elements being electrically coupled in a filter configuration to produce a characteristic frequency;

a ferroelectric material positioned near either the first element or the second element; and

a control line coupled to the ferroelectric material for varying a dielectric constant of the ferroelectric material and the characteristic frequency;

wherein a Q of the tunable ferro-electric filter is greater than about 100.